

**EX. 6**

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

**MEMORANDUM**

**September 16, 2003**

**TO:** *DJL* Dawson Lasseter, Chief Engineer, Air Quality Division

**THROUGH:** *PF* Phillip Fielder, P.E., Engineering Section

**THROUGH:** *RN* Herb Neumann, P.E., Tulsa Regional Office

**THROUGH:** *RS* Peer Review

**FROM:** *DJS* David Schutz, P.E., New Source Permits Section

**SUBJECT:** Evaluation of Permit Application No. 97-136-TV (M-2)  
Oklahoma Gas & Electric Company  
Muskogee Generating Station  
Sections 21, 22, 27 and 28, T15N, R19E, Muskogee County  
Located Near Muskogee on Hwy. 62 on the East Bank of the Arkansas River

**SECTION I. INTRODUCTION**

Oklahoma Gas & Electric Company (OG&E) has applied for a modified Title V operating permit for its Muskogee Generating station. The following changes were requested from the initial Title V operating permit issued June 27, 2001.

- The facility is currently required to do Method 9 or Method 22 visible emissions observations of the stack of the facility No. 3 Boiler (EUG 2) whenever the unit burns No. 2 fuel oil. OG&E requested that the condition be changed to mention No. 6 fuel oil as well as No. 2 fuel oil. They also requested that "Method 22" not be mentioned, but rather just visible emissions observations recording if any visible emissions are detected. Adding the mention of "No. 6 fuel oil" corrects an oversight, and the monitoring requirements will be effectively identical.
- The No. 3 Boiler is currently allowed to conduct daily Method 9 observations for four days, and if all results are in compliance with the 20% opacity limit, testing may revert to weekly. OG&E requested that the allowance for reduced monitoring be deleted. This makes for increased monitoring requirements.
- The No. 3 Boiler is currently required to "comply with the provisions for excess emissions during start-up, shut-down, and malfunction...." OG&E requests that this wording be replaced with "comply with the provisions for excess emissions in OAC 252:100-9." The change will clarify the applicable rule and will not change any applicable standard.

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- The Coal Unloading & Processing Equipment (EUG 6B) is also required to conduct visible emissions testing for the presence of visible emissions, and if they are detected, conduct Method 9 testing. OG&E requests that the initial VE testing be clarified to be during the daylight hours, and if any visible emissions are detected, that the follow-up Method 9 testing be conducted during subsequent daylight observations. There is currently no certification available for nighttime Method 9 observations. The requested changes clarify monitoring requirements but do not relax them.
- Also for the Coal Unloading & Processing, OG&E requests that the permit clarify that if the Method 9 testing shows less than 20% opacity, "compliance is demonstrated, no further action is required;" if compliance is not demonstrated, follow-up Method 9 testing will be required for subsequent daylight activities. The requested changes clarify monitoring requirements but do not relax them.
- In addition for the Coal Unloading & Processing, the permit currently requires two additional Method 9 tests within the next 24 hours. However, the facility does not unload coal on a daily basis; the condition, as worded, would require the facility to acquire coal strictly for the purposes of VE testing, or could be construed as allowing testing while the coal handling equipment is not operating. This condition will be removed, allowing testing to be conducted at the next daylight coal unloading event.
- The Coal Unloading & Processing is currently required to "comply with the provisions for excess emissions during start-up, shut-down, and malfunction...." OG&E requests that this wording be replaced with "comply with the provisions for excess emissions in OAC 252:100-9." The change will clarify the applicable rule and will not change any applicable standard.
- Units No. 6-B-08 and 6-B-09 are currently shown as being associated with Boilers 4 and 5, but are actually associated with Boiler 6. This is a minor typographical error which will be corrected.
- The capacity of the heavy equipment diesel tank (Unit 8-B-03) is currently listed at "5,800" gallons. It is actually 7,500 gallons. Corrective the volume will not change the status of the tank as an "insignificant activity."
- The flyash silos vent to electrostatic precipitators instead of baghouses. Corrective the controls will not change the status of the silos as "insignificant activities."
- Although Boiler No. 6 is authorized to burn various waste products, this allowance was not shown previously in the permit evaluation. That mention will be added to correspond to the allowance which has been in the Specific Conditions.

**PERMIT MEMORANDUM 97-136-TV (M-2)****3****SECTION II. FACILITY DESCRIPTION**

The Muskogee Generating Station utilizes sub-bituminous coal, natural gas, fuel oils (both distillate and residual), and some waste products (used oil-sorb, used antifreeze, used solvents, used oil, chemical cleaning wastes, hazardous waste fuel, activated carbon, demineralizer resin, and waste water treatment sludge) to produce electricity (SIC 4911). The facility includes 4 large boiler units and auxiliary facilities for storage and processing of solid and liquid fuels and for handling ash and other wastes. The Muskogee facility currently uses natural gas as a start-up fuel and sub-bituminous low-sulfur Wyoming coal as the primary fuel. None of the boilers are designed to operate on oil continuously.

The facility became commercially operational in 1956 and currently operates under Permit No. 97-136-TV (M-1). OG&E has obtained Applicability Determinations for the incineration of some waste products. The facility is a Phase II source for the Acid Rain Program and is located in an attainment area.

The primary air pollution emitting operations are four large boiler units in electrical generation service. These units are summarized below. Unit 3 is a gas-fired boiler, while Units 4, 5, and 6 are coal-fired units. Units 1 and 2, the oldest units, are being demolished.

Fuel oil is stored in one 40,000-gallon storage tank, a tank constructed in 1956, and is fed into Unit 3 by pipeline. In addition, OG&E combusts small amounts of waste products from the Muskogee Generating Station and other OG&E facilities in the boilers.

There are three operating scenarios for the facility. For Scenario I, Boilers 4, 5, and 6 are fired only with coal and Unit 3 and the Auxiliary Boiler are fired with natural gas. For Scenario II, minor amounts of wastes are added to the coal and burned. This has a negligible effect on overall emissions, therefore, the two scenarios will be considered to have identical emission rates. In Scenario III, fuel oil is used in Unit 3. For purposes of emissions estimation, the fuel oil will be assumed to be residual oil.

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**BOILER UNITS AT THE MUSKOGEE GENERATING STATION**

<b>Boiler Unit</b>	<b>Capacity</b>	<b>Construction Date</b>	<b>Primary Fuel</b>	<b>Auxiliary Fuels</b>
Unit 3 (2-B-01)	1690 MMBTUH	1956	Natural Gas	Residual oil
Unit 4 (3-B-01)	5480 MMBTUH	1970	296 TPH Coal	Waste hydrocarbon liquids, oil-sorb, solvents, wastewater treatment sludge, activated carbon, demineralizer resin, and natural gas
Unit 5 (3-B-02)	5480 MMBTUH	1970	296 TPH Coal	Waste hydrocarbon liquids, oil-sorb, solvents, wastewater treatment sludge, activated carbon, demineralizer resin, and natural gas
Unit 6 (4-B-01)	5480 MMBTUH	1978	296 TPH Coal	Waste hydrocarbon liquids, oil-sorb, solvents, wastewater treatment sludge, activated carbon, demineralizer resin, and natural gas
Auxiliary Boiler (2-B-02)	12.7 MMBTUH	1956	12,700 SCFH gas	None

Coal is transported to the facility from Wyoming by railroad. A rotary coal car dumper empties railcars onto conveyor belts. These conveyors transport coal to a large pile. Reclaim conveyors move coal as-received to crushers via transfer towers. Coal is reduced in size at the crusher and screened before being conveyed to "tripper galleries" (storage silos) and then to boilers as fuel. Unit 6 also has an intermediate surge bin for pulverized coal.

In addition to the primary emission units, there are several support units for fuel and ash handling and storage:

**PERMIT MEMORANDUM 97-136-TV (M-2)****5****AUXILIARY UNITS**

<b>Unit Designation</b>	<b>Description</b>	<b>Construction Date</b>	<b>Capacity</b>	<b>Emissions Control Methods</b>
8-B-02	Oil fuel tank	1956	40,000 gallons	None
6-B-01	Rotary coal car dumper	1972	3,000 TPH	Water spray
6-B-02	Radial coal stacker	1972	3,000 TPH	Water spray
5-B-01	Coal piles	1972	--	Water spray
6-B-03	Coal reclaim conveyor	1972	1,200 TPH	Baghouses
6-B-08	Coal transfer tower #1	1978	600 TPH	Baghouses
6-B-09	Coal transfer tower #2	1978	600 TPH	Baghouses
6-B-11	Coal transfer tower #3	1978	300 TPH	Baghouses
6-B-06	Linear coal stacker	1978	1,200 TPH	Water spray
6-B-07	Coal reclaim conveyor	1978	1,200 TPH	Baghouses
6-B-04	Coal crusher (for Boilers 4 and 5)	1972	600 TPH	Baghouses
6-B-10	Coal crusher (for Boiler 6)	1978	300 TPH	Baghouses
6-B-05	Tripper gallery (for Boilers 4 and 5)	1972	600 TPH	Baghouses
6-B-13	Tripper gallery (for Boiler 6)	1978	300 TPH	Baghouses
6-B-12	Coal surge bin (for Boiler 6)	1978	--	Baghouses
7-B-01	Ash silo	1972	--	Closed system
7-B-02	Ash silo	1972	--	Closed system
7-B-03	Ash silo	1982	--	Closed system
7-B-04	Ash silo	1978	--	Closed system
5-B-01	Unpaved roads	1956	--	Water spray

Units 4, 5, and 6 can each potentially combust approximately 300 tons per hour of coal to produce 3.8 million pounds per hour of steam each. These units have a design maximum of 550 MW electrical output. During the combustion process, fly ash is collected by electrostatic precipitators. The precipitators are designed to remove 99.52% of the fly ash from the flue gas and collect it in hoppers. The fly ash is then pneumatically conveyed to the silos where it is stored.

The auxiliary boiler uses natural gas to provide steam, as required, to the building heating systems.

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**SECTION III. EQUIPMENT****EUG 1 Facility Wide**

<b>EU ID#</b>	<b>Point ID#</b>	<b>EU Name/Model</b>	<b>Construction Date</b>
None	None	Facility	<1956

**EUG 2 Grandfathered Boiler**

<b>EU ID#</b>	<b>Point ID#</b>	<b>EU Name/Model</b>	<b>Construction Date</b>
2-B	01	Unit 3 Boiler, 1,690 MMBTUH, Babcock & Wilcox, S/N RB-237	1956

**EUG 2A Insignificant Boiler**

<b>EU ID#</b>	<b>Point ID#</b>	<b>EU Name/Model</b>	<b>Construction Date</b>
2-B	02	Auxiliary Boiler, 12.7 MMBTUH, S/N 82-14776H-84960	1982

**EUG 3 1972 Boilers**

<b>EU ID#</b>	<b>Point ID#</b>	<b>EU Name/Model</b>	<b>Construction Date</b>
3-B	01	Unit 4 Boiler, 5,480 MMBTUH, Combustion Engineering, S/N 8372	1972
3-B	02	Unit 5 Boiler, 5,480 MMBTUH, Combustion Engineering, S/N 8472	1972

**EUG 4 1978 Boiler**

<b>EU ID#</b>	<b>Point ID#</b>	<b>EU Name/Model</b>	<b>Construction Date</b>
4-B	01	Unit 6 Boiler, 5,480 MMBTUH, Combustion Engineering, S/N AA-B0001	1978

**EUG 5 Coal Piles**

<b>EU ID#</b>	<b>Point ID#</b>	<b>EU Name/Model</b>	<b>Construction Date</b>
5-B	01, 02, 03, 04	Coal Pile	1972

**EUG 6A Coal Unloading & Processing**

<b>EU ID#</b>	<b>Point ID#</b>	<b>EU Name/Model</b>	<b>Construction Date</b>
6-B	01	Rotary Coal Car Dumper	1972
6-B	02	Radial Stacker from Car Dumper	1972
6-B	03	Reclaim Conveyor (Units 4 & 5)	1972
6-B	04	Crusher (Units 4 & 5)	1972
6-B	05	Tray Conveyor (Units 4 & 5)	1972

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**EUG 6B Coal Unloading & Processing**

<b>EU ID#</b>	<b>Point ID#</b>	<b>EU Name/Model</b>	<b>Construction Date</b>
6-B	07	Reclaim Convevor (Unit 6)	1978
6-B	10	Crusher (Unit 6)	1978
6-B	11	Transfer Tower #3 (Unit 6)	1978
6-B	12	Surge Bin (Unit 6)	1978
6-B	13	Tripper Gallery	1978
6-B	06	Linear Stacker (Units 4 & 5)	1978
6-B	08	Transfer Tower #1 (Unit 6)	1978
6-B	09	Transfer Tower #2 (Unit 6)	1978

**EUG 7 Fly Ash Storage**

<b>EU ID#</b>	<b>Point ID#</b>	<b>EU Name/Model</b>	<b>Construction Date</b>
7-B	01	Fly Ash Silo	1972
7-B	02	Fly Ash Silo	1972
7-B	03	Fly Ash Silo	1972
7-B	04	Fly Ash Silo	1972

**EUG 8 Fuel Tanks**

<b>EU ID#</b>	<b>Point ID#</b>	<b>EU Name/Model</b>	<b>Capacity (Gallons)</b>	<b>Construction Date</b>
8-B	01	Gasoline	2,000	1972
8-B	02	Diesel (machine shop)	11,900	1975
8-B	03	Diesel (heavy equipment)	7,500	1979
8-B	04	Diesel (heavy equipment)	10,000	1976
8-B	05	Diesel (Unit 3 auxiliary generator)	750	1956
8-B	06	Diesel (Unit 3 fire pump)	200	1997
8-B	07	Diesel (Unit 4 fire pump)	300	1997
8-B	08	Diesel (Unit 6 auxiliary generator)	400	1982
8-B	09	Diesel (Unit 4 auxiliary generator)	500	1997
8-B	10	Diesel (Unit 5 auxiliary generator)	500	1998
8-B	11	Liquid fuel day tank	40,000	1956

**EUG 9 Insignificant Engines**

<b>EU ID#</b>	<b>Point ID#</b>	<b>EU Name/Model</b>	<b>Serial Number</b>	<b>Capacity (HP)</b>	<b>Construction Date</b>
9-B	01	Detroit Diesel Model 5117982	12VA-11595	710	1970
9-B	02	Cummins Series 403	44944535	200	1975
9-B	03	Cummins Model NT855-F2	10946353	340	1979
9-B	05	Waukesha Model F-2896	288522	710	1976
9-B	04	Waukesha Model F-2896 DSIM	288523	710	1976
9-B	06	Detroit Diesel Model 81637300	16VF002836	710	1997

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The last two engines were constructed after October, 1972, and have emissions in excess of 5 TPY based on 500 hours operating. However, the "Insignificant Activities" list does not state the 5 TPY level nor an upper bound to horsepower for emergency generators. The addition is exempt from PSD review based on the September 6, 1995 EPA memo, "Calculating Potential to Emit for Emergency Generators" which states that 500 hours is an appropriate default for estimating emissions from these sources. All equipment is, therefore, in compliance with permitting requirements.

**Stack Parameters**

<b>Point</b>	<b>Height Feet</b>	<b>Diameter feet</b>	<b>Flow ACFM</b>	<b>Temperature °F</b>
Boiler 3	176	15.4	339539	300
Boiler 4	350	24	1259309	264
Boiler 5	350	24	1259309	264
Boiler 6	500	21.5	1803588	264

**SECTION IV. EMISSIONS**

Emission estimates reflect continuous operations (8,760 hr/yr) using emission factors as follow:

- Auxiliary boiler: gas fuel emissions factors from AP-42 (7/98) for boilers smaller than 100 MMBTUH: 0.10 lb/MMBTU NOx, 0.084 lb/MMBTU CO, 0.0055 lb/MMBTU VOC, 0.0076 lb/MMBTU PM, and 0.0006 lb/MMBTU SO<sub>2</sub>.
- Boiler 3: gas fuel emissions factors from AP-42 (7/98) for boilers larger than 100 MMBTUH and pre-NSPS: 0.28 lb/MMBTU NOx, 0.084 lb/MMBTU CO, 0.0055 lb/MMBTU VOC, 0.0076 lb/MMBTU PM, and 0.0006 lb/MMBTU SO<sub>2</sub>; oil fuel emissions from AP-42 (9/98) for boilers larger than 100 MMBTUH burning No. 6 fuel oil: 47 lb/Mgal NOx, 5 lb/Mgal CO, 0.76 lb/Mgal VOC, 3.63 lb/Mgal PM, and 7.07 lb/Mgal SO<sub>2</sub> (assuming 0.045% sulfur in fuel oil). Although the facility may burn distillate fuel instead of residual, residual oil constitutes the worst-case emissions case.
- Boilers 4 and 5: coal-firing emissions factors as follows: NOx, 0.70 lb/MMBTU (from Subchapter 33), CO, 0.5 lb/ton [AP-42 (9/98), Section 1.1], VOC 0.05 lb/ton [AP-42 (9/98), Section 1.1 for pulverized coal], PM<sub>10</sub>, 0.10 lb/MMBTU (from Subchapter 19), and SO<sub>2</sub>, 1.2 lb/MMBTU (from Subchapter 31).
- Boiler 6: coal-firing emissions factors as follows: NOx, 0.70 lb/MMBTU (from Subchapter 33), CO, 0.5 lb/ton [AP-42 (9/98), Section 1.1], VOC 0.05 lb/ton [AP-42 (9/98), Section 1.1 for pulverized coal], PM<sub>10</sub>, 0.039 lb/MMBTU (derived from a 1978 BACT determination), and SO<sub>2</sub>, 1.2 lb/MMBTU (from Subchapter 31).

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- Coal piles: PM emissions were taken from EPA Region VIII's "Compilation of Past Practices and Interpretations by EPA on Air Quality Review of Surface Mining Operations" for coal processing: 0.2 lb/ton each for crushing, screening, and stacking, and 0.02 lb/ton for conveying operations.
- Coal processing: PM emissions were taken from EPA Region VIII's "Compilation of Past Practices and Interpretations by EPA on Air Quality Review of Surface Mining Operations" for coal processing: 0.2 lb/ton each for crushing, screening, and stacking, and 0.02 lb/ton for conveying operations, and assuming 99.9% control efficiency of fabric filters.
- Ash handling: PM emissions were calculated based on AP-42 (1/95) Section 11.8 for ash handling (110 lb/ton) assuming 99.9% control efficiency for venting to ESPs.
- Fuel tanks emissions were calculated using the EPA "TANKS2" computer program
- Engine emissions were taken from AP-42 (10/96) Section 3.3: NOx 0.031 lb/hp-hr; CO, 0.00668 lb/hp-hr; SO<sub>2</sub>, 0.00205 lb/hp-hr; PM<sub>10</sub>, 0.0022 lb/hp-hr; and VOC, 0.00247 lb/hr-hr.
- Toxic pollutants from coal burning: factors in AP-42 (9/98) Section 1.1.
- Toxic pollutants from fuel oil burning: factors in AP-42 (9/98) Section 1.3.

The maximum emissions of mercury from sludge burning were stated as the NESHAP Subpart E limitation of 3,200 grams per day (0.294 lb/hr). These rates do not take into account the control efficiency of the boilers' electrostatic precipitators, normally expected to be 50% or more.

**WASTE MATERIALS BURNED IN 1995**

<b>Waste Materials Burned</b>	<b>Quantities</b>
Used oil	5,542 gallons
Oil dry	10,942 pounds
Used anti-freeze	175 gallons

Potential coal usage is approximately 8 million tons per year. The waste materials constitute approximately 1 millionth of the total fuel used. Combustion of waste materials is subject to rules and regulations 40 CFR Parts 266 and 279 and OAC 252:205.

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**POTENTIAL FACILITY EMISSIONS  
SCENARIOS I AND II**

Emission Unit	PM <sub>10</sub>		SO <sub>2</sub>		NOx		VOC		CO	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
2-B-01	12.84	56.26	1.01	4.44	473.2	2072.6	9.30	40.71	141.96	621.78
2-B-02	0.10	0.42	0.01	0.03	1.27	5.56	0.07	0.31	1.07	4.67
3-B-01	548.00	2400.24	6576.0	28802.9	3836.0	16801.7	15.00	65.70	150.00	657.00
3-B-02	548.00	2400.24	6576.0	28802.9	3836.0	16801.7	15.00	65.70	150.00	657.00
4-B-01	212.00	928.56	6576.0	28802.9	3605.0	15789.9	15.00	65.70	150.00	657.00
5-B-01	60.00	19.71	--	--	--	--	--	--	--	--
5-B-02	60.00	19.71	--	--	--	--	--	--	--	--
5-B-03	60.00	19.71	--	--	--	--	--	--	--	--
5-B-04	60.00	19.71	--	--	--	--	--	--	--	--
6-B-01	21.00	27.59	--	--	--	--	--	--	--	--
6-B-02	60.00	78.84	--	--	--	--	--	--	--	--
6-B-03	24.00	52.56	--	--	--	--	--	--	--	--
6-B-04	0.24	0.53	--	--	--	--	--	--	--	--
6-B-05	0.24	0.53	--	--	--	--	--	--	--	--
6-B-06	24.00	52.56	--	--	--	--	--	--	--	--
6-B-07	12.00	26.28	--	--	--	--	--	--	--	--
6-B-08	0.01	0.02	--	--	--	--	--	--	--	--
6-B-09	0.01	0.02	--	--	--	--	--	--	--	--
6-B-10	0.01	0.05	--	--	--	--	--	--	--	--
6-B-11	0.01	0.01	--	--	--	--	--	--	--	--
6-B-12	0.01	0.03	--	--	--	--	--	--	--	--
6-B-13	0.01	0.03	--	--	--	--	--	--	--	--
7-B-01	1.65	7.23	--	--	--	--	--	--	--	--
7-B-02	1.65	7.23	--	--	--	--	--	--	--	--
7-B-03	1.65	7.23	--	--	--	--	--	--	--	--
7-B-04	1.65	7.23	--	--	--	--	--	--	--	--
8-B-01	0.01	0.01	--	--	--	--	--	--	--	--
9-B-01	1.56	0.39	1.46	0.36	22.01	5.50	1.75	0.44	4.74	1.19
9-B-02	0.44	0.11	0.41	0.10	6.20	1.55	0.49	0.12	1.34	0.33
9-B-03	0.75	0.19	0.70	0.17	10.54	2.64	0.84	0.21	2.27	0.57
9-B-04	1.56	0.39	2.52	0.63	22.01	5.50	1.75	0.44	4.74	1.19
9-B-05	1.56	0.39	2.52	0.63	22.01	5.50	1.75	0.44	4.74	1.19
9-B-06	1.56	0.39	2.52	0.63	22.01	5.50	1.75	0.44	4.74	1.19
<b>TOTAL</b>	1716.52	6134.40	19739.2	86415.7	11856.2	51497.6	62.70	240.21	615.60	2603.11

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**POTENTIAL FACILITY EMISSIONS  
SCENARIO III**

Emission Unit	PM <sub>10</sub>		SO <sub>x</sub>		NOx		VOC		CO	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
2-B-01	43.81	191.91	79.66	348.91	567.35	2484.99	3.04	13.32	60.36	264.36
2-B-02	0.10	0.42	0.01	0.03	1.27	5.56	0.07	0.31	1.07	4.67
3-B-01	548.00	2400.24	6576.0	28802.9	3836.0	16801.7	15.00	65.70	150.0	657.00
3-B-02	548.00	2400.24	6576.0	28802.9	3836.0	16801.7	15.00	65.70	150.0	657.00
4-B-01	212.0	928.56	6576.0	28802.9	3605.0	15789.9	15.00	65.70	150.0	657.00
5-B-01	60.00	19.71	--	--	--	--	--	--	--	--
5-B-02	60.00	19.71	--	--	--	--	--	--	--	--
5-B-03	60.00	19.71	--	--	--	--	--	--	--	--
5-B-04	60.00	19.71	--	--	--	--	--	--	--	--
6-B-01	21.00	27.59	--	--	--	--	--	--	--	--
6-B-02	60.00	78.84	--	--	--	--	--	--	--	--
6-B-03	24.00	52.56	--	--	--	--	--	--	--	--
6-B-04	0.24	0.53	--	--	--	--	--	--	--	--
6-B-05	0.24	0.53	--	--	--	--	--	--	--	--
6-B-06	24.00	52.56	--	--	--	--	--	--	--	--
6-B-07	12.00	26.28	--	--	--	--	--	--	--	--
6-B-08	0.01	0.02	--	--	--	--	--	--	--	--
6-B-09	0.01	0.02	--	--	--	--	--	--	--	--
6-B-10	0.01	0.05	--	--	--	--	--	--	--	--
6-B-11	0.01	0.01	--	--	--	--	--	--	--	--
6-B-12	0.01	0.03	--	--	--	--	--	--	--	--
6-B-13	0.01	0.03	--	--	--	--	--	--	--	--
7-B-01	1.65	7.23	--	--	--	--	--	--	--	--
7-B-02	1.65	7.23	--	--	--	--	--	--	--	--
7-B-03	1.65	7.23	--	--	--	--	--	--	--	--
7-B-04	1.65	7.23	--	--	--	--	--	--	--	--
8-B-01	0.01	0.01	--	--	--	--	--	--	--	--
9-B-01	1.56	0.39	1.46	0.36	22.01	5.50	1.75	0.44	4.74	1.19
9-B-02	0.44	0.11	0.41	0.10	6.20	1.55	0.49	0.12	1.34	0.33
9-B-03	0.75	0.19	0.70	0.17	10.54	2.64	0.84	0.21	2.27	0.57
9-B-04	1.56	0.39	1.46	0.36	22.01	5.50	1.75	0.44	4.74	1.19
9-B-05	1.56	0.39	1.46	0.36	22.01	5.50	1.75	0.44	4.74	1.19
9-B-06	1.56	0.39	1.46	0.36	22.01	5.50	1.75	0.44	4.74	1.19
<b>TOTAL</b>	1747.49	6270.05	19814.6	86759.3	11950.8	51910.0	56.44	212.82	534.00	2245.69

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**POTENTIAL FACILITY TOXIC POLLUTANTS EMISSIONS \***

<b>Pollutant</b>	<b>Toxicity Category</b>	<b>Emissions</b>		<b>De Minimis Levels</b>	
		<b>lb/hr</b>	<b>TPY</b>	<b>lb/hr</b>	<b>TPY</b>
Acrolein	A	0.20	0.88	0.57	0.60
Arsenic	A	0.29	1.25	0.57	0.60
Beryllium	A	0.01	0.06	0.57	0.60
Cadmium	A	0.04	0.16	0.57	0.60
Chromium	A	0.18	0.79	0.57	0.60
Formaldehyde	A	0.17	0.73	0.57	0.60
Hydrogen Chloride	C	1065.9	4671.24	5.60	6.00
Hydrogen Fluoride	A	132.22	579.46	0.57	0.60
Manganese	C	0.34	1.49	5.60	6.00
Mercury	A	0.30	1.54	0.57	0.60
Nickel	A	1.14	5.02	0.57	0.60

\* Worst-case emissions, Scenario III (fuel oil in Boiler 3).

**SECTION V. INSIGNIFICANT ACTIVITIES**

The insignificant activities identified and justified in the application and listed in OAC 252:100-8, Appendix I, are listed below. Recordkeeping for activities indicated with “\*” is listed in the Specific Conditions.

- \* Stationary reciprocating engines burning natural gas, gasoline, aircraft fuels, or diesel fuel which are either used exclusively for emergency power generations or for peaking power service not exceeding 500 hours per year. There are four emergency generators and two diesel-powered fire water pumps in this category (EUG No. 9).
- \* Emissions from fuel storage/dispensing equipment operated solely for facility owned vehicles if fuel throughput is not more than 2,175 gallons/day, averaged over a 30-day period. The facility has gasoline and diesel fueling operations.
- \* Storage tanks with less than or equal to 10,000 gallons capacity that store volatile organic liquids with a true vapor pressure less than or equal to 1.0 psia at maximum storage temperature. There are several small diesel tanks in EUG No. 8 in this category.
- Cold degreasing operations utilizing solvents that are denser than air.
- Welding and soldering operations utilizing less than 100 pounds of solder and 53 tons per year of electrodes. These activities are conducted as a part of routine maintenance and are considered trivial activities. Recordkeeping will not be required in the Specific Conditions.

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- Hazardous waste and hazardous materials drum staging areas.
- Sanitary sewage collection and treatment facilities other than incinerators and Publicly Owned Treatment Works (POTW). Stacks or vents for sanitary sewer plumbing traps are also included (i.e., lift station).
- Exhaust systems for chemical, paint, and/or solvent storage rooms or cabinets, including hazardous waste satellite (accumulation) areas. The facility includes a chemical storage area for the maintenance operations.
- Hand wiping and spraying of solvents from containers with less than 1 liter capacity used for spot cleaning and/or degreasing in ozone attainment areas.
- \* Activities having the potential to emit no more than 5 TPY (actual) of any criteria pollutant.

Fugitive emissions from the following operations are below 5 TPY:

Rotary Coal Car Dumper	Fly Ash Silos
Coal Stacker Tower	Auxiliary Boiler (Scenario I & II)
Coal Reclaim	Coal Surge Bin
Coal Crusher Tower	Coal Transfer Tower

**SECTION VI. OKLAHOMA AIR POLLUTION CONTROL RULES**

OAC 252:100-1 (General Provisions) [Applicable]  
 Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable]  
 Subchapter 3 enumerates the primary and secondary ambient air quality standards and the significant deterioration increments. At this time, all of Oklahoma is in attainment of these standards.

OAC 252:100-4 (New Source Performance Standards) [Applicable]  
 Federal regulations in 40 CFR Part 60 are incorporated by reference as they exist on July 1, 2002, except for the following: Subpart A (Sections 60.4, 60.9, 60.10, and 60.16), Subpart B, Subpart C, Subpart Ca, Subpart Cb, Subpart Cc, Subpart Cd, Subpart Ce, Subpart AAA, and Appendix G. These requirements are addressed in the "Federal Regulations" section.

OAC 252:100-5 (Registration, Emission Inventory, and Annual Fees) [Applicable]  
 The owner or operator of any facility that is a source of air emissions shall submit a complete emission inventory annually on forms obtained from the Air Quality Division. Emission inventories were submitted and fees paid for previous years as required.

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**OAC 252:100-8 (Operating Permits (Part 70))**

[Applicable]

This facility meets the definition of a major source since it has the potential to emit regulated pollutants in excess of 100 TPY. As such, a Title V (Part 70) operating permit is required. Any planned changes in the operation of the facility which result in emissions not authorized in the permit and which exceed the "Insignificant Activities" or "Trivial Activities" thresholds require prior notification to AQD and may require a permit modification. Insignificant activities mean individual emission units that either are on the list in Appendix I or whose actual calendar year emissions do not exceed the following limits:

- 5 TPY of any one criteria pollutant, 2 TPY of any one hazardous air pollutant (HAP) or 5 TPY of multiple HAPs or 20% of any threshold less than 10 TPY for a HAP that the EPA may establish by rule
- 0.6 TPY of any one Category A toxic substance
- 1.2 TPY of any one Category B toxic substance
- 6.0 TPY of any one Category C toxic substance

Emissions limitations from the existing permit for Unit 6 will be repeated in this permit. The PSD permit for Unit 6 overlooked the coal processing equipment; limitations for those units will be incorporated into this permit.

**OAC 252:100-9 (Excess Emission Reporting Requirements)**

[Applicable]

In the event of any release which results in excess emissions, the owner or operator of such facility shall notify the Air Quality Division as soon as practical during normal office hours and no later than 4:30 pm the next working day. Within ten (10) business days further notice shall be tendered in writing containing specific details of the incident. Part 70 sources must report any exceedance that poses an imminent and substantial danger to public health, safety, or the environment as soon as is practicable; but under no circumstances shall notification be more than 24 hours after the exceedance.

**OAC 252:100-13 (Prohibition of Open Burning)**

[Applicable]

Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in this subchapter.

**OAC 252:100-19 (Particulate Matter)**

[Applicable]

This subchapter specifies limits for fuel-burning equipment particulate emissions based on heat input capacity. Emissions limitations and anticipated emissions are tabulated following. Emissions listed for the boilers are based on the allowable emissions. All units are in compliance with Subchapter 19.

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Emission Unit	Description	Capacity, MMBTUH	Allowable PM Emissions, lb/hr	Calculated PM Emissions, lb/hr	
				Scenario I & II	Scenario III
2-B-01	Boiler 3	1690	169.00	12.84	43.81
2-B-02	Auxiliary boiler	12.7	6.35	0.10	0.10
3-B-01	Boiler 4	5480	548.00	103.5	103.5
3-B-02	Boiler 5	5480	548.00	103.5	103.5
4-B-01	Boiler 6	5480	548.00	212.00	212.00
9-B-04	Engine	5.7	3.41	1.56	1.56
9-B-06	Engine	5.7	3.41	1.56	1.56

Expected PM emissions from Boilers 4 and 5 were calculated based on a coal feed rate of 300 TPH, an average ash content of 5%, AP-42 (9/98) Section 1.1 uncontrolled emission factor of "2.3\*A" for pulverized coal units, and a control efficiency of 97%.

Subchapter 19 also limits PM emissions from various processes excluding fuel-burning equipment and fugitive emissions. Limitations are specified based on process weight rate. Emissions limitations and anticipated emissions are tabulated following. All units are in compliance with Subchapter 19.

**COMPLIANCE BY MINOR PM EMISSION UNITS WITH OAC 252:100-19**

Process Point	Process Rate, TPH	Allowable PM Emission Rate, lb/hr	Controlled Emission Rate, lb/hr
6-B-04	1200	80.0	0.24
6-B-05	1200	80.0	0.24
6-B-08	600	71.2	0.01
6-B-09	600	71.2	0.01
6-B-10	300	63.0	0.01
6-B-11	300	63.0	0.01
6-B-12	300	63.0	0.01
6-B-13	300	63.0	0.01
7-B-01	15	25.2	1.65
7-B-02	15	25.2	1.65
7-B-03	15	25.2	1.65
7-B-04	15	25.2	1.65

The controlled emission rates show that the facility is in compliance with Subchapter 19.

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OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]  
 No discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. Any unit which is subject to an NSPS opacity limitation is not subject to Subchapter 25; this would include Units 4, 5, and 6 and the coal processing equipment in EUG 6B. All other emissions units are subject to Subchapter 25. The permit will require weekly observation of the coal processing equipment, and daily observations of the Boiler 3 stack whenever fuel oil is burned; the permit will require opacity testing to be conducted using Method 22 initially, and if any visible emissions are observed, using Method 9. When burning fuel oil in Boiler 3, the permit will require Method 22 and then Method 9 if visible emissions are detected. The permit will also include reduced visible emission observation requirements when burning fuel oil if no visible emissions are detected or if visible emissions observations using Method 9 are below the 20 % opacity limitation.

OAC 252:100-29 (Fugitive Dust) [Applicable]  
 No person shall cause or permit the discharge of any visible fugitive dust emissions beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. Water sprays and enclosures are used on conveyor transfer points and stockpiles to minimize emissions of fugitive dust as required by Subchapter 29.

OAC 252:100-31 (Sulfur Compounds) [Applicable]  
Part 3 establishes short-term ambient standards for SO<sub>2</sub>. Air dispersion modeling of the entire facility was conducted as part of its PSD permit application for Unit 6. The application assumed a maximum coal sulfur content of approximately 0.6% for all coal-fired boilers. Results of the modeling are tabulated following. All ambient SO<sub>2</sub> impacts are in compliance with the limitations of Subchapter 31.

**SO<sub>2</sub> AMBIENT IMPACTS**

Averaging Time	Subchapter 31 Limitation, ug/m <sup>3</sup>	Maximum Facility Ambient Impacts, ug/m <sup>3</sup>
3 hours	650	305
24 hours	130	55
Annual	80	5.0

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Part 5 specifies limitations of SO<sub>2</sub> emissions from new fuel-burning equipment. Units 4, 5, and 6 are subject to these standards; Unit 3 was constructed prior to the effective date of Subchapter 31. Solid-fueled units are limited to 1.2 lb/MMBTU SO<sub>2</sub> emissions. Emissions monitoring as required by NSPS, Subpart D has shown compliance with this rule. Engines 9-B-04 and 9-B-06, liquid fueled units, are subject to a limitation of 0.8 lb/MMBTU SO<sub>2</sub>. Using No. 2 diesel with 0.5% or less sulfur, SO<sub>2</sub> emissions will be 0.5 lb/MMBTU or less. These emissions are in compliance with Subchapter 31.

**OAC 252:100-33 (Nitrogen Oxides)**

[Applicable]

This subchapter limits NOx emissions from new solid fuel-burning equipment with a rated heat input greater than 50 MMBTUH to 0.7 lb/MMBTU. This standard is applicable to Boilers 4, 5, and 6 but not to Boiler 3, which predated this rule, nor to the Auxiliary Boiler, which is smaller than the 50 MMBTUH threshold. The PSD permit for Boiler 6 specifies an identical emission limitation to Subchapter 33 and to NSPS, Subpart D. Emissions monitoring has shown compliance with the applicable emissions limitations.

**OAC 252:100-37 (VOC)**

[Applicable]

Part 3 requires storage tanks with a capacity of 400 gallons or more and containing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. The 2,000-gallon gasoline tank predated the submerged fill requirement. The 40,000-gallon fuel oil storage tank, emergency generator fuel tanks, and diesel vehicle fuel tank have vapor pressures of 0.01 psia, therefore these requirements are not applicable.

Part 5 limits the VOC content of coatings used in coating lines or operations. This facility does not normally conduct coating or painting operations except for routine maintenance of the facility and equipment which is exempt.

Part 7 requires fuel-burning equipment to be operated and maintained so as to minimize emissions. Temperature and available air must be sufficient to provide essentially complete combustion.

**OAC 252:100-41 (Hazardous and Toxic Air Contaminants)**

[Applicable]

Part 3 addresses hazardous air contaminants. NESHAP, as found in 40 CFR Part 61, are adopted by reference as they exist on July 31, 2002, with the exception of Subparts B, H, I, K, Q, R, T, W and Appendices D and E, all of which address radionuclides. In addition, General Provisions as found in 40 CFR Part 63, Subpart A, and the Maximum Achievable Control Technology (MACT) standards as found in 40 CFR Part 63, Subparts F, G, H, I, J, L, M, N, O, Q, R, S, T, U, W, X, Y, AA, BB, CC, DD, EE, GG, HH, II, JJ, LL, KK, MM, OO, PP, QQ, RR, SS, TT, UU, VV, WW, XX, YY, CCC, DDD, EEE, GGG, HHH, III, JJ, LLL, MMM, NNN, OOO, PPP, QQQ, RRR, TTT, UUU, VVV, XXX, CCCC, GGGG, HHHH, NNNN, SSSS, TTTT, UUUU, VVVV, and XXXX are hereby adopted by reference as they exist on July 31, 2002. These standards apply to both existing and new sources of HAPs. These requirements are covered in the "Federal Regulations" section.

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Part 5 is a state-only requirement governing toxic air contaminants. New sources (constructed after March 9, 1987) emitting any category "A" pollutant above de minimis levels must perform a BACT analysis. All sources are required to demonstrate that emissions of any toxic air contaminant which exceeds the de minimis level does not cause or contribute to a violation of the MAAC.

Dispersion modeling has been conducted using the EPA SCREEN3 model. Calculated 1-hour averages were then converted to 24-hour averages by multiplying by the transform factor 0.4. The following table shows that impacts are in compliance with Subchapter 41.

**MAAC COMPLIANCE**

Pollutant	Toxicity Category	MAAC ( $\mu\text{g}/\text{m}^3$ )	Max. Downwind Impact ( $\mu\text{g}/\text{m}^3$ )
Acrolein	A	2.0	0.0074
Arsenic	A	0.02	0.0107
Beryllium	A	0.02	0.0004
Cadmium	A	0.5	0.0004
Chromium	A	0.25	0.0066
Formaldehyde	A	12	0.0063
Hydrogen Chloride	C	700	39.357
Hydrogen Flouride	A	50	4.8834
Manganese	C	100	0.0004
Mercury	A	0.5	0.0024
Nickel	A	0.15	0.0350

**OAC 252:100-43 (Testing, Monitoring, and Recordkeeping)**

[Applicable]

This subchapter provides general requirements for testing, monitoring and recordkeeping and applies to any testing, monitoring or recordkeeping activity conducted at any stationary source. To determine compliance with emissions limitations or standards, the Air Quality Director may require the owner or operator of any source in the state of Oklahoma to install, maintain and operate monitoring equipment or to conduct tests, including stack tests, of the air contaminant source. All required testing must be conducted by methods approved by the Air Quality Director and under the direction of qualified personnel. A notice-of-intent to test and a testing protocol shall be submitted to Air Quality at least 30 days prior to any EPA Reference Method stack tests. Emissions and other data required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

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**The following Oklahoma Air Pollution Control Rules are not applicable to this facility:**

OAC 252:100-11	Alternative Reduction	not eligible
OAC 252:100-15	Mobile Sources	not in source category
OAC 252:100-17	Incinerators	not type of emission unit
OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Feed & Grain Facility	not in source category
OAC 252:100-39	Nonattainment Areas	not in a subject area
OAC 252:100-47	Landfills	not type of emission unit

**SECTION VII. FEDERAL REGULATIONS****PSD, 40 CFR Part 52**

[Not Applicable at this Time]

Unit 6 commenced construction after the effective date of PSD. (The remainder of the facility began construction prior to the effective date of the PSD regulations and is not currently subject to PSD limitations.) A PSD permit was issued by EPA Region VI on September 25, 1978. Any future emission increases must be evaluated for PSD if they exceed a significance level (100 TPY CO, 40 TPY NO<sub>x</sub>, 40 TPY SO<sub>2</sub>, 40 TPY VOC, 25 TPY PM, 15 TPY PM<sub>10</sub>, or 0.6 TPY lead).

**NSPS, 40 CFR Part 60**

[Subparts D and Y Are Applicable]

Subpart D (Fossil-Fuel-Fired Steam Generators) is applicable to steam generating units constructed after August 17, 1971, which have a capacity greater than 250 MMBTU/hr heat input. Boilers No. 4, 5, and 6 each has a heat input rate of 5,480 MMBTUH and commenced construction in 1972, 1972, and 1978, respectively, therefore are subject to the emissions limitations and emissions monitoring standards. Boiler 3 commenced construction prior to August 17, 1971. The Auxiliary Boiler (12.7 MMBTUH) is smaller than the 250 MMBTUH threshold.

Subpart K (VOL Storage Vessels) The 40,000-gallon fuel oil tank was installed in 1956 which is prior to the applicable time period of June 11, 1973 to May 19, 1978.

Subpart Kb (VOL Storage Vessels) The 2,000-gallon gasoline tank is below the 10,567-gallon threshold for this Subpart.

Subpart Y (Coal Preparation Plants) This facility handles 7,200 tons of coal per day, and has coal storage systems and coal processing and conveying equipment, which are defined as affected sources per 40 CFR 60.250(a). The coal processing equipment for Unit 6 was constructed after 1978, therefore, Subpart Y affects that part of the facility. The remainder of the coal processing and handling equipment was constructed in 1972, so Subpart Y is not applicable to that part of the facility.

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**NESHAP, 40 CFR Part 61**

[Applicable]

Subpart E (Mercury Emissions) affects combustion of water treatment sludge, limiting mercury emissions to 3,200 grams per day from any such operation. The applicant has requested permission to use an alternative method of testing sludge from the method specified in 40 CFR 61.54. OG&E has attempted to find a laboratory capable of performing this method, but has not been able to find one. They have requested use of SW-846 Method 7471A. Alternative testing methods are allowed under 40 CFR 61.13. The Specific Conditions will allow use of the alternative method.

**NESHAP, 40 CFR Part 63**

[Not Applicable At This Time]

There is no current standard that applies to this facility. However, there is a schedule for MACT standards under 40 CFR 63 which may affect the boilers in the facility: Subpart DDDDD, "Industrial-Commercial-Institutional Boilers and Process Heaters" due by March 2002. Air Quality reserves the right to reopen this permit if any of these standards become applicable.

**CAM, 40 CFR Part 64**

[Not Applicable at this Time]

Under 40 CFR 64.2(b), CAM does not affect Acid Rain standards. Compliance Assurance Monitoring, as published in the Federal Register on October 22, 1997, applies to any pollutant specific emission unit at a major source, that is required to obtain a Title V permit, if it meets all the following criteria:

- It is subject to an emission limit or standard for an applicable regulated air pollutant.
- It uses a control device to achieve compliance with the applicable emission limit or standard.
- It has potential emissions, prior to the control device, of the applicable regulated air pollutant greater than major source levels.

This application was submitted before April 28, 1998. The operator has until renewal of their Title V permit to comply with applicable monitoring standards.

**Chemical Accident Prevention Provisions, 40 CFR Part 68**

[Not Applicable]

This facility does not store any regulated substance above the applicable threshold limits. More information on this federal program is available at the web site: <http://www.epa.gov/ceppo/>.

**Acid Rain Permit Requirements, 40 CFR Part 72**

[Applicable]

Acid Rain Permit No. 97-136-AR (M-1) was issued on January 6, 1998, which satisfies the permit requirements.

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Acid Rain Monitoring Requirements, 40 CFR Part 75 [Applicable]  
 Boilers 3, 4, 5, and 6 are Phase II Acid Rain units. Continuous emissions monitoring systems (CEMS) were certified on December 16-19, 1994, for Units 4, 5, and 6. Under Scenarios I and II (gas fuel only), Boiler 3 is required to monitor NOx and CO<sub>2</sub> emissions, while under Scenario III the unit is required to monitor fuel (sulfur content and usage rates) along with NOx and CO<sub>2</sub>.

Stratospheric Ozone Protection, 40 CFR Part 82 [Applicable]  
 This facility does not produce, consume, recycle, import, or export any controlled substances or controlled products as defined in this part, nor does this facility perform service on motor (fleet) vehicles which involve ozone-depleting substances. Therefore, as currently operated, this facility is not subject to these requirements. To the extent that the facility has air-conditioning units that apply, the permit requires compliance with Part 82.

## **SECTION VIII. COMPLIANCE**

### **Inspection**

A compliance inspection was conducted on March 8, 2000, by Ms. Roxanne Roberts of the Regional Office at Tulsa. The inspection indicated that the facility was operating as described in the permit application and supplemental materials, and that all emission units were in compliance with all applicable regulations.

### **Testing**

The facility continues to monitor emissions as required by NSPS and 40 CFR 75 (acid rain) and conducts annual testing of the equipment for verification. Air Quality observations have shown testing of the continuous emission monitors have been conducted properly. CEMs data is submitted to EPA Headquarters on a quarterly basis as required by the Acid Rain Program.

Method 9 performance testing was conducted on the Unit No. 6 coal processing system on May 1, 2000.

### **Tier Classification And Public Review**

The applicant has submitted an affidavit that they are not seeking a permit for land use or for any operation upon land owned by others without their knowledge. The affidavit certifies that the applicant owns the real property.

This application has been determined to be Tier I based on the request for a modification to an existing major source permit that is considered a minor modification as defined in Subchapter 8. Minor modifications are considered any modifications that:

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1. Do not violate any applicable requirement, or state-only requirements (This modification will not violate any applicable requirements.);
2. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the permit (This modification will clarify monitoring, reporting, and recordkeeping requirements but will not relax any existing requirements.);
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis (This modification does not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis.);
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement or state-only requirement which the source has assumed to avoid some other applicable requirement or state-only requirement to which the source would otherwise be subject. Such terms and conditions include federally-enforceable emissions caps assumed to avoid classification as a modification under any provision of Title I and alternative emissions limits approved pursuant to regulations promulgated under § 112(i)(5) of the Act (This permit does not establish or change a permit term or condition to avoid applicable requirements.); and
5. Are not modifications under any provision of Title I of the Act. (This modification is not a modification under any provision of Title I of the Act. Modification refers to an increase in emissions at PSD major sources; there will be no change in emissions resulting from any change at this facility.)

The initial Title V operating permit was determined to be a Tier II based on being a major facility for which a Title V permit is required. The Notice of Filing was published in the *Muskogee Daily Phoenix* on March 5, 1997. The notice stated that the application was available for review at the OG&E district office, 302 N. 7<sup>th</sup> Street, Muskogee, OK. The draft permit was also made available for public review by another published notice, on May 21, 2001, in the *Muskogee Daily Phoenix*. The facility is located within 50 miles of the Oklahoma-Arkansas border; the state of Arkansas was notified of the draft permit. Public review was concluded with no comments received from the public, the state of Arkansas, or EPA Region VI.

The “proposed” permit was submitted to EPA Region VI for review; EPA made no comments on the “proposed” permit.

Information on all permit actions is available for review by the public in the Air Quality section of the DEQ Web page:<http://www.deq.state.ok.us/>.

#### **Fees Paid**

Part 70 source minor operating permit modification fee of \$500.

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**SECTION IX. SUMMARY**

The facility was constructed as described in the permit application. Ambient air quality standards are not threatened at this site. The Compliance and Enforcement Units concur with issuance of this permit. Issuance of the permit is recommended.



## PART 70 PERMIT

AIR QUALITY DIVISION  
STATE OF OKLAHOMA

DEPARTMENT OF ENVIRONMENTAL QUALITY  
707 N. ROBINSON STREET, SUITE 4100  
P.O. BOX 1677

OKLAHOMA CITY, OKLAHOMA 73101-1677

Date SEP 16 2003

Permit No. 97-136-TV (M-2)

Oklahoma Gas & Electric, having complied with the requirements of the law, is hereby granted permission to operate a coal-fired electric generation plant in Sections 21, 22, 27, and 28, T15N, R19E Muskogee, Muskogee County, Oklahoma,

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subject to the following conditions, attached:

- Standard Conditions dated October 17, 2001  
 Specific Conditions

This permit shall expire July 27, 2006, except as Authorized under Section VIII of the Standard Conditions.

A handwritten signature in black ink, appearing to read "Steve Frank".

Chief Engineer, Air Quality Division

**PERMIT TO OPERATE  
AIR POLLUTION CONTROL FACILITY  
SPECIFIC CONDITIONS**

**Oklahoma Gas & Electric Company  
Muskogee Generating Station**

**Permit Number 97-136-TV (M-2)**

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on March 5, 1997, with supplemental information received October 6, 2000, and July 9, 2003. The Evaluation Memorandum dated September 16, 2003, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating permit limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein.

1. Points of emissions and emissions limitations for each point: [OAC 252:100-8-6(a)]

**EUG 2 Grandfathered Boiler:** The emissions are "grandfathered" and limited to the existing equipment as it is.

EU ID#	Point ID#	EU Name/Model	Construction Date
2-B	01	Unit 3 Boiler, 1,690 MMBTUH, Babcock & Wilcox, S/N RB-237	1956

- A. The permittee shall conduct daily visual observations of the boiler exhausts for at least 12 minutes while burning No. 2 or No. 6 fuel oil for more than 24 continuous hours and keep a record of these observations. If visible emissions are detected, then the permittee shall conduct a thirty-minute opacity reading in accordance with EPA Reference Method No. 9.
  - i. If a Method 9 observation exceeds 20% opacity the permittee shall conduct at least two additional Method 9 observations within the next 24-hours.
  - ii. If more than one six-minute Method 9 observation exceeds 20% opacity in any consecutive 60 minutes; or more than three six-minute Method 9 observations in any consecutive 24 hours exceeds 20% opacity; or if any six-minute Method 9 observation exceeds 60% opacity; the owner or operator shall comply with the provisions for excess emissions in OAC 252:100-9. [OAC 252:100-25]

**EUG 2A Insignificant Boiler:** The following emissions unit is considered insignificant since emissions are less than 5 TPY of any pollutant.

EU ID#	Point ID#	EU Name/Model	Construction Date
2-B	02	Auxiliary Boiler, 12.7 MMBTUH	1982

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**EUG 3 1972 Boilers:**

- A. Boilers No. 4 and 5 shall have the following emission limitations:

[40 CFR 60.42(a)(1), 43(a)(2), and 44(a)(3)]

<b>Emission Unit</b>	<b>PM lbs/MMBTU</b>	<b>SO<sub>2</sub> lbs/MMBTU</b>	<b>NO<sub>x</sub> lbs/MMBTU</b>	<b>Opacity* %</b>
3-B-01	0.10	1.2	0.7	20
3-B-02	0.10	1.2	0.7	20

\* opacity shall be limited to 20% except for one six minute period per hour of not more than 27%. [40 CFR 60.42(a)(2)]

- B. Boilers 4 and 5 are subject to NSPS Subpart D and shall comply with all applicable requirements. [OAC 252:100-4]
- C. The permittee shall operate and maintain the continuous monitoring systems for Boiler 4 and 5 using the applicable methods and procedures set forth and shall record the output of the systems. [40 CFR 60.45(a)]
- D. Boilers 4 and 5 are authorized to utilize coal as primary fuel and natural gas as startup fuel. [OAC 252:100-31]
- E. The permittee shall comply with the reporting and recordkeeping requirements of 40 CFR 60.49b.
- F. Compliance with the SO<sub>2</sub> lb/MMBTU emission limits in Specific Condition 1 shall be determined on the basis of the average emission rate for three successive boiler operating hours, a 3-hour rolling average. [40 CFR 60.43]
- G. Compliance with the NO<sub>x</sub> lb/MMBTU emission limits shall be determined on the basis of the average emission rate for a 3-hour rolling average. [OAC 252:100-33]

**EUG 4 Permitted Boiler No. 6**

<b>EU ID#</b>	<b>Point ID#</b>	<b>EU Name/Model</b>	<b>Construction Date</b>
4-B	01	Unit 6 Boiler, 5,480 MMBTUH, Combustion Engineering, S/N AA-B0001	1978

- A. The above unit is subject to emissions limitations as follow: [OAC 252:100-8-5(d)]

<b>Emission Unit</b>	<b>PM lb/hr</b>	<b>SO<sub>2</sub> lb/hr</b>	<b>NO<sub>x</sub> lb/hr</b>	<b>VOC lb/hr</b>	<b>CO lb/hr</b>
4-B-01	212.0	6576.0	3605.0	390.00	180.0

- B. Boiler No. 6 shall have the following emission limitations:

[40 CFR 60.429(a)(1), 43(a)(2), and 44(a)(3)]

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Emission Unit	SO <sub>2</sub> lbs/MMBTU	NO <sub>x</sub> lbs/MMBTU	Opacity* %
4-B-01	1.2	0.7	20

\* opacity shall be limited to 20% except for one six minute period per hour of not more than 27%. [40 CFR 60.42(a)(2)]

- C. Boiler 6 (4-B-01) is subject to NSPS Subpart D and shall comply with all applicable requirements including those in Specific Condition 1. [OAC 252:100-4]
- D. The permittee shall operate and maintain the continuous monitoring systems for Boiler 6 (4-B-01) using the applicable methods and procedures set forth and shall record the output of the systems. [40 CFR 60.45(a)]
- E. Boiler 6 (4-B-01) is authorized to utilize coal as primary fuel and natural gas as startup fuel. [OAC 252:100-31]
- F. The permittee shall comply with the reporting and recordkeeping requirements of 40 CFR 60.49b.
- G. Compliance with the SO<sub>2</sub> lb/MMBTU emission limits in Specific Condition 1 shall be determined on the basis of the average emission rate for three successive boiler operating hours, a 3-hour rolling average. [40 CFR 60.43]
- H. Compliance with the NO<sub>x</sub> lb/MMBTU emission limits shall be determined on the basis of the average emission rate for a 3-hour rolling average. [OAC 252:100-33]

**EUG 5 Coal Piles:** The emissions are “grandfathered” and limited to the existing equipment as it is.

EU ID#	Point ID#	EU Name/Model	Construction Date
5-B	01	Coal Piles	1972

**EUG 6A Coal Unloading and Processing:** The emissions are “grandfathered” and limited to the existing equipment as it is.

EU ID#	Point ID#	EU Name/Model	Construction Date
6-B	01	Rotary Coal Car Dumper	1972
6-B	02	Radial Stacker from Car Dumper	1972
6-B	03	Reclaim Conveyor (Units 4 & 5)	1972
6-B	04	Crusher (Units 4 & 5)	1972
6-B	05	Tripper Gallery (Units 4 & 5)	1972

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**EUG 6B Coal Unloading & Processing:** The following emissions units are subject to emissions limitations as shown.

EU ID#	Point ID#	EU Name/Model	PM Emissions	
			lb/hr	TPY
6-B	07	Reclaim Conveyor (Unit 6)	12.00	26.28
6-B	10	Crusher (Unit 6)	0.01	0.05
6-B	11	Transfer Tower #3 (Unit 6)	0.01	0.01
6-B	12	Surge Bin (Unit 6)	0.01	0.03
6-B	13	Tripper Gallery	0.01	0.03
6-B	06	Linear Stacker (Units 4 & 5)	0.01	0.01
6-B	08	Transfer Tower #1 (Unit 6)	0.01	0.03
6-B	09	Transfer Tower #2 (Unit 6)	0.01	0.03

A. The owner or operator shall comply with all applicable NSPS Subpart Y requirements of 40 CFR Part 60 for coal processing equipment serving Unit 6 which was constructed, reconstructed, or modified after October 24, 1974.

[OAC 252:100-4 and 40 CFR 60.250 to 60.254]

B. Operations 6-B-10, 11, 12, and 13 shall vent exhausts to fabric filters or equivalent devices with at least 99% control efficiency for PM. [OAC 252:100-8-6(a)]

C. The permittee shall water coal in Operation 6-B-07 when needed to control fugitive dust emissions to 20% or less. [OAC 252:100-25 and 40 CFR 60.252(c)]

D. The permittee shall conduct Method 22 visual observations of emissions from the discharges from each of the above units during at least one daylight unloading event per week. In no case shall the observation period be less than six minutes in duration. If visible emissions are observed for six minutes in duration for any observation period and such emissions are not the result of a malfunction, then the permittee shall conduct, for the identified points, during the same unloading event or the next daylight unloading event, a visual observation of emissions, in accordance with 40 CFR Part 60, Appendix A, Method 9.

i. If the Method 9 observations, triggered above, shows no visible emissions, or no emissions of a shade or density greater than twenty (20) percent equivalent opacity, compliance is demonstrated, no further action is required, and the frequency may be reduced to weekly Method 22 visual observations, as above. If the Method 9 observation, triggered above, show emissions of a shade or density greater than twenty (20) percent equivalent opacity, a Method 9 observation shall be conducted once per daylight unloading event until compliance is demonstrated. Once compliance is demonstrated, no further action is required and the frequency may revert back to weekly Method 22 visible observations Upon any showing of non-compliance the observation frequency shall revert to once per daylight unloading event.

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ii. If more than one six-minute Method 9 observation exceeds 20% opacity in any consecutive 60 minutes; or more than three six-minute Method 9 observations in any consecutive 24 hours exceeds 20% opacity; or if any six-minute Method 9 observation exceeds 60% opacity; the owner or operator shall comply with the provisions for excess emissions of OAC 252:100-9. [OAC 252:100-25]

**EUG 7 Flyash Storage:** The following emissions unit is considered insignificant since emissions are less than 5 TPY of any pollutant.

EU ID#	Point ID#	EU Name/Model	Construction Date
7-B	01	Fly Ash Silo	1972
7-B	02	Fly Ash Silo	1972
7-B	03	Fly Ash Silo	1982
7-B	04	Fly Ash Silo	1978

**EUG 8 Liquid Fuel Storage:** The following emissions units are considered insignificant since emissions are less than 5 TPY of any pollutant.

EU ID#	Point ID#	EU Name/Model	Capacity (Gallons)	Construction Date
8-B	01	Gasoline	2,000	1972
8-B	02	Diesel (machine shop)	11,900	1975
8-B	03	Diesel (heavy equipment)	7,500	1979
8-B	04	Diesel (heavy equipment)	10,000	1976
8-B	05	Diesel (Unit 3 auxiliary generator)	750	1956
8-B	06	Diesel (Unit 3 fire pump)	200	1997
8-B	07	Diesel (Unit 4 fire pump)	300	1997
8-B	08	Diesel (Unit 6 auxiliary generator)	400	1982
8-B	09	Diesel (Unit 4 auxiliary generator)	500	1997
8-B	10	Diesel (Unit 5 auxiliary generator)	500	1998
8-B	11	Liquid fuel day tank	40,000	1956

**EUG 9 Insignificant Engines:** The following emissions units are considered insignificant.

EU ID#	Point ID#	EU Name/Model	Serial Number	Capacity (HP)	Construction Date
9-B	01	Detroit Diesel Model 5117982	12VVA-11595	710	1970
9-B	02	Cummins Series 403	44944535	200	1975
9-B	03	Cummins Model NT855-F2	10946353	340	1979
9-B	05	Waukesha Model F-2896	288522	710	1976
9-B	04	Waukesha Model F-2896 DSIM	288523	710	1976
9-B	06	Detroit Diesel Model 81637300	16VF002836	710	1997

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2. Boilers 4, 5, and 6 (3-B-01; 3-B-02, and 4-B-01) are authorized to combust non-hazardous waste, on an as-needed basis, generated on-site, from other OG&E facilities, or from OG&E employees and retired employees as or when authorized pursuant to 40 CFR Part 279.

- A. The waste combusted will be wastewater treatment sludge, used oil-dry, used oil, used solvent, used anti-freeze, boiler cleaning solution (EDTA), activated carbon, demineralizer resin, slop oil and ash collected from oil combustion. [OAC 252:100-31]
- B. Emissions of mercury from water treatment sludge combustion shall not exceed 3,200 grams per day. The permittee may demonstrate, using the approved methods, that mercury present in sludge does not equal 3,200 grams per day. [40 CFR 61.52(b)]
- C. Prior to burning any waste water treatment sludge, the permittee shall conduct testing of the mercury content of water treatment sludges. Testing shall be conducted using either Method 105 of 40 CFR 61 Appendix B, or by Method 7471A of SW-846, "Test Methods for Evaluating Solid Waste" as approved by EPA on September 28, 2000.

[40 CFR 61.54(a) and 40 CFR 60.13(h)]

3. The permittee shall be authorized to operate the facility continuously (24 hours per day, every day of the year). [OAC 252:8-6(a)]

4. The facility is subject to the Acid Rain Program and shall comply with all applicable requirements including the following: [40 CFR 75]

- A. SO<sub>2</sub> allowances and NOx limits as listed in Acid Rain Permit
- B. Report quarterly emissions to EPA per 40 CFR 75.
- C. Conduct RATA tests per 40 CFR 75.
- D. QA/QC plan for maintenance of the CEMS.

5. The records of operations shall be maintained on-site for at least five years after the date of recording and shall be provided to regulatory personnel upon request. [OAC 252:8-6(a)(3)(b)]

- A. Acid Rain CEMS data and opacity monitor data for Units 4, 5 and 6.
- B. Quantities of fuel and waste products burned by type (annual).
- C. Amounts of wastewater treatment sludges and mercury content of those sludges for each event of sludge being burned.
- D. Visible emission testing for Unit 3 for times when liquid fuels are burned.

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6. The following emissions controls shall be utilized on the following emissions points:

[OAC 252:100-8-6]

<b>Unit Designation</b>	<b>Description</b>	<b>Emissions Control Methods</b>
5-B-01	Coal piles	Water spray
6-B-01	Rotary coal car dumper	Water spray
6-B-02	Radial coal stacker	Water spray

7. The following records shall be maintained on-site to verify insignificant activities.

[OAC 252:8-6(a)(3)(b)]

- A. Stationary reciprocating engines: number of hours operated for each generation engine in EUG No. 9 (monthly and calendar year).
- B. Fuel storage/dispensing equipment: gasoline purchases for Tank 8-B-1 (monthly and calendar year).

8. This permit supersedes all previous Air Quality permits except for Acid Rain Permit No. 97-136-AR for this facility which are now null and void.

9. The Permit Shield (Standard Conditions, Section VI) is extended to the following requirements that have been determined to be inapplicable to this facility.[OAC 252:100-8-6(d)(2)]

- A. OAC 252:100-11 Alternative Emissions Reduction
- B. OAC 252:100-15 Mobile Sources
- C. OAC 252:100-23 Cotton Gins
- D. OAC 252:100-24 Grain Elevators
- E. OAC 252:100-39 Nonattainment Areas
- F. OAC 252:100-47 Landfills

**TITLE V (PART 70) PERMIT TO OPERATE / CONSTRUCT  
STANDARD CONDITIONS  
(October 17, 2001)**

**SECTION I. DUTY TO COMPLY**

- A. This is a permit to operate / construct this specific facility in accordance with Title V of the federal Clean Air Act (42 U.S.C. 7401, et seq.) and under the authority of the Oklahoma Clean Air Act and the rules promulgated there under. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]
- B. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ). The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances.
- C. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, for revocation of the approval to operate under the terms of this permit, or for denial of an application to renew this permit. This permit is valid for operations only at the specific location listed. [OAC 252:100-8-1.3 and 8-6 (a)(7)(A)]
- D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [OAC 252:100-8-6 (a)(7)(B)]

**SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS**

- A. Any exceedance resulting from emergency conditions and/or posing an imminent and substantial danger to public health, safety, or the environment shall be reported in accordance with Section XIV. [OAC 252:100-8-6 (a)(3)(C)(iii)]
- B. Deviations that result in emissions exceeding those allowed in this permit shall be reported as provided in OAC 252:100-9, Excess Emission Reporting Requirements. [OAC 252:100-8-6 (a)(3)(C)(iv)]
- C. Oral notifications (fax is also acceptable) shall be made to the AQD central office as soon as practical during normal office hours and no later than 4:30 p.m. the next working day. Written notifications shall also be made to the AQD central office within ten business days. Every written report submitted under this section shall be certified by a responsible official. [OAC 252:100-8-6 (a)(3)(C)(iii) and (iv)]

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## SECTION III. MONITORING, TESTING, RECORDKEEPING &amp; REPORTING

A. The permittee shall keep records as specified in this permit. These records, including monitoring data and necessary support information, shall be retained on-site or at a nearby field office for a period of at least five years from the date of the monitoring sample, measurement, report, or application, and shall be made available for inspection by regulatory personnel upon request. Support information includes all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. The permit shall specify which records may be maintained in computerized form.

[OAC 252:100-8-6 (a)(3)(B)(ii), 8-6 (c)(1), and 8-6 (c)(2)(B)]

B. Records of required monitoring shall include:

- (1) the date, place and time of sampling or measurement;
- (2) the date or dates analyses were performed;
- (3) the company or entity which performed the analyses;
- (4) the analytical techniques or methods used;
- (5) the results of such analyses; and
- (6) the operating conditions as existing at the time of sampling or measurement.

[OAC 252:100-8-6 (a)(3)(B)(i)]

C. The results of any required monitoring shall be reported to the AQD at 6-month intervals, commencing on the first day of the month beginning six (6) full months after the date of approval to operate under the terms of this permit. All instances of deviations from permit requirements shall be clearly identified in the report.

[OAC 252:100-8-6 (a)(3)(C)(i) and (ii)]

D. If any testing shows emissions in excess of limitations specified in this permit, the owner or operator shall comply with the provisions of Section II of these standard conditions.

[OAC 252:100-8-6 (a)(3)(C)(iii)]

E. In addition to any monitoring, recordkeeping or reporting requirement specified in this permit, monitoring and reporting may be required under the provisions of OAC 252:100-45, Monitoring of Emissions, or as required by any provision of the Federal Clean Air Act or Oklahoma Clean Air Act.

F. Submission of quarterly or semi-annual reports required by any applicable requirement that are duplicative of the reporting required in the previous paragraph will satisfy the reporting requirements of the previous paragraph if noted on the submitted report.

G. Every report submitted under this section shall be certified by a responsible official.

[OAC 252:100-8-6 (a)(3)(C)(iv)]

H. Any owner or operator subject to the provisions of NSPS shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility or any malfunction of the air pollution control equipment.

[40 CFR 60.7 (b)]

## TITLE V PERMIT STANDARD CONDITIONS

I. Any owner or operator subject to the provisions of NSPS shall maintain a file of all measurements and other information required by the subpart recorded in a permanent file suitable for inspection. This file shall be retained for at least two years following the date of such measurements, maintenance, and records.

[40 CFR 60.7 (d)]

J. The permittee of a facility that is operating subject to a schedule of compliance shall submit to the DEQ a progress report at least semi-annually. The progress reports shall contain dates for achieving the activities, milestones or compliance required in the schedule of compliance and the dates when such activities, milestones or compliance was achieved. The progress reports shall also contain an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.

[OAC 252:100-8-6 (c)(4)]

K. All testing must be conducted by methods approved by the Executive Director under the direction of qualified personnel. All tests shall be made and the results calculated in accordance with standard test procedures. The permittee may request the use of alternative test methods or analysis procedures. The AQD shall approve or disapprove the request within 60 days. When a portable engine analyzer is used to measure emissions it shall be setup, calibrated, and operated in accordance with the manufacturer's instructions and with the following conditions:

[OAC 252:100-8-6 (a) (3) (A) (iv) and OAC 252:100-43]

- (1) Engines shall be tested "as found." No tuning or maintenance for the purpose of lowering emissions is allowed on the day of the emission sampling.
- (2) Three test runs shall be conducted at 90% or greater of the full load as stated in the permit if possible. Exceptions to this must be documented. The load and other parameters used to calculate emissions shall be documented and included in the report.
- (3) During the emission tests the rated horsepower, the moisture content, the concentrations of NO<sub>x</sub>, CO, and O<sub>2</sub>, the flow rate, and the temperature of the exhaust gases shall be monitored (or calculated by an accepted method) and recorded. This information shall be included in the report.

L. The permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 CFR Part 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards.

[OAC 252:100-4-5 and OAC 252:100-41-15]

#### SECTION IV. COMPLIANCE CERTIFICATIONS

A. No later than 30 days after each anniversary date of the issuance of an operating permit, the permittee shall submit to the AQD, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit and of any other applicable requirements which have become effective since the issuance of this permit. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source.

[OAC 252:100-8-6 (c)(5)(A), (C)(v), and (D)]

B. The certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent;

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the methods used for determining compliance, currently and over the reporting period; and a statement that the facility will continue to comply with all applicable requirements.

[OAC 252:100-8-6 (c)(5)(C)(i)-(iv)]

C. Any document required to be submitted in accordance with this permit shall be certified as being true, accurate, and complete by a responsible official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete.

[OAC 252:100-8-5 (f) and OAC 252:100-8-6 (c)(1)]

D. Any facility reporting noncompliance shall submit a schedule of compliance for emissions units or stationary sources that are not in compliance with all applicable requirements. This schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the emissions unit or stationary source is in noncompliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the emissions unit or stationary source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. Except that a compliance plan shall not be required for any noncompliance condition which is corrected within 24 hours of discovery.

[OAC 252:100-8-5 (e)(8)(B) and OAC 252:100-8-6 (c)(3)]

#### **SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM**

The permittee shall comply with any additional requirements that become effective during the permit term and that are applicable to the facility. Compliance with all new requirements shall be certified in the next annual certification.

[OAC 252:100-8-6 (c)(6)]

#### **SECTION VI. PERMIT SHIELD**

A. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC 252:100-8) shall be deemed compliance with the applicable requirements identified and included in this permit.

[OAC 252:100-8-6 (d)(1)]

B. Those requirements that are applicable are listed in the Standard Conditions and the Specific Conditions of this permit. Those requirements that the applicant requested be determined as not applicable are listed in the Evaluation Memorandum and are summarized in the Specific Conditions of this permit.

[OAC 252:100-8-6 (d)(2)]

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**SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT**

The permittee shall file with the AQD an annual emission inventory and shall pay annual fees based on emissions inventories. The methods used to calculate emissions for inventory purposes shall be based on the best available information accepted by AQD.

[OAC 252:100-5-2.1, -5-2.2, and -8-6 (a)(8)]

**SECTION VIII. TERM OF PERMIT**

A. Unless specified otherwise, the term of an operating permit shall be five years from the date of issuance.

[OAC 252:100-8-6 (a)(2)(A)]

B. A source's right to operate shall terminate upon the expiration of its permit unless a timely and complete renewal application has been submitted at least 180 days before the date of expiration.

[OAC 252:100-8-7.1 (d)(1)]

C. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-8-1.4(b)) if the construction is not commenced within 18 months after the date the permit or authorization was issued, or if work is suspended for more than 18 months after it is commenced.

[OAC 252:100-8-1.4(a)]

D. The recipient of a construction permit shall apply for a permit to operate (or modified operating permit) within 180 days following the first day of operation.

[OAC 252:100-8-4(b)(5)]

**SECTION IX. SEVERABILITY**

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[OAC 252:100-8-6 (a)(6)]

**SECTION X. PROPERTY RIGHTS**

A. This permit does not convey any property rights of any sort, or any exclusive privilege.

[OAC 252:100-8-6 (a)(7)(D)]

B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued.

**SECTION XI. DUTY TO PROVIDE INFORMATION**

A. The permittee shall furnish to the DEQ, upon receipt of a written request and within sixty (60) days of the request unless the DEQ specifies another time period, any information that the

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DEQ may request to determine whether cause exists for modifying, reopening, revoking, reissuing, terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit.

[OAC 252:100-8-6 (a)(7)(E)]

B. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 27A O.S. 2-5-105(18). Confidential information shall be clearly labeled as such and shall be separable from the main body of the document such as in an attachment.

[OAC 252:100-8-5 (a) and OAC 252:100-8-6 (a)(7)(E)]

C. Notification to the AQD of the sale or transfer of ownership of this facility is required and shall be made in writing within 10 days after such date.

[Oklahoma Clean Air Act, 27A O.S. § 2-5-112 (G)]

## SECTION XII. REOPENING, MODIFICATION & REVOCATION

A. The permit may be modified, revoked, reopened and reissued, or terminated for cause. Except as provided for minor permit modifications, the filing of a request by the permittee for a permit modification, revocation, reissuance, termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition.

[OAC 252:100-8-6 (a)(7)(C) and OAC 252:100-8-7.2 (b)]

B. The DEQ will reopen and revise or revoke this permit as necessary to remedy deficiencies in the following circumstances:

[OAC 252:100-8-7.3 and -8-7.4]

- (1) Additional requirements under the Clean Air Act become applicable to a major source category three or more years prior to the expiration date of this permit. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
- (2) The DEQ or the EPA determines that this permit contains a material mistake or that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (3) The DEQ determines that inaccurate information was used in establishing the emission standards, limitations, or other conditions of this permit. The DEQ may revoke and not reissue this permit if it determines that the permittee has submitted false or misleading information to the DEQ.

C. If "grandfathered" status is claimed and granted for any equipment covered by this permit, it shall only apply under the following circumstances:

[OAC 252:100-5-1.1]

- (1) It only applies to that specific item by serial number or some other permanent identification.
- (2) Grandfathered status is lost if the item is significantly modified or if it is relocated outside the boundaries of the facility.

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D. To make changes other than (1) those described in Section XVIII (Operational Flexibility), (2) administrative permit amendments, and (3) those not defined as an Insignificant Activity (Section XVI) or Trivial Activity (Section XVII), the permittee shall notify AQD. Such changes may require a permit modification. [OAC 252:100-8-7.2 (b)]

E. Activities that will result in air emissions that exceed the trivial/insignificant levels and that are not specifically approved by this permit are prohibited.

**SECTION XIII. INSPECTION & ENTRY**

A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized regulatory officials to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1998, § 2-5-105(18) for confidential information submitted to or obtained by the DEQ under this section):

- (1) enter upon the permittee's premises during reasonable/normal working hours where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- (2) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (3) inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (4) as authorized by the Oklahoma Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit.

[OAC 252:100-8-6 (c)(2)]

**SECTION XIV. EMERGENCIES**

A. Any emergency and/or exceedance that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to AQD as soon as is practicable; but under no circumstance shall notification be more than 24 hours after the exceedance. [The degree of promptness in reporting shall be proportional to the degree of danger.]

[OAC 252:100-8-6 (a)(3)(C)(iii)(I) and (II)]

B. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. [OAC 252:100-8-2]

C. An emergency shall constitute an affirmative defense to an action brought for noncompliance with such technology-based emission limitation if the conditions of paragraph D below are met.

[OAC 252:100-8-6 (e)(1)]

D. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that:

- (1) an emergency occurred and the permittee can identify the cause or causes of the emergency;
- (2) the permitted facility was at the time being properly operated;
- (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) the permittee submitted notice of the emergency to AQD within 24 hours of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, the probable cause of the exceedance, any steps taken to mitigate emissions, and corrective actions taken; and
- (5) the permittee submitted a follow up written report within 10 working days of first becoming aware of the exceedance.

[OAC 252:100-8-6 (e)(2), 8-6 (a)(3)(C)(iii)(I) and (IV)]

E. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

[OAC 252:100-8-6 (e)(3)]

## SECTION XV. RISK MANAGEMENT PLAN

The permittee, if subject to the provision of Section 112(r) of the Clean Air Act, shall develop, and register with the appropriate agency, a risk management plan, by June 20, 1999 or the applicable effective date.

[OAC 252:100-8-6 (a)(4)]

## SECTION XVI. INSIGNIFICANT ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate individual emissions units that are either on the list in Appendix I, or whose actual calendar year emissions do not exceed any of the limits below. Any activity to which a State or federal applicable requirement applies is not insignificant even if it meets the criteria below or is included on the insignificant activities list.

[OAC 252:100-8-2]

- (1) 5 tons per year of any one criteria pollutant.
- (2) 2 tons per year for any one hazardous air pollutant (HAP) or 5 tons per year for an aggregate of two or more HAP's, or 20 percent of any threshold less than 10 tons per year for single HAP that the EPA may establish by rule.
- (3) 0.6 tons per year for any one category A substance, 1.2 tons per year for any one category B substance or 6 tons per year for any one category C substance as defined in 252:100-41-40.

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## SECTION XVII. TRIVIAL ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate any individual or combination of air emissions units that are considered inconsequential and are on the list in Appendix J. Any activity to which a State or federal applicable requirement applies is not trivial even if included on the trivial activities list.

[OAC 252:100-8-2]

## SECTION XVIII. OPERATIONAL FLEXIBILITY

A. A facility may implement any operating scenario allowed for in its Part 70 permit without the need for any permit revision or any notification to the DEQ (unless specified otherwise in the permit). When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating.

[OAC 252:100-8-6 (a)(10) and 8-6 (f)(1)]

B. The permittee may make changes within the facility that:

- (1) result in no net emissions increases,
- (2) are not modifications under any provision of Title I of the federal Clean Air Act, and
- (3) do not cause any hourly or annual permitted emission rate of any existing emissions unit to be exceeded;

provided that the facility provides the EPA and the DEQ with written notification as required below in advance of the proposed changes, which shall be a minimum of 7 days, or 24 hours for emergencies as defined in OAC 252:100-8-6 (e). The permittee, the DEQ, and the EPA shall attach each such notice to their copy of the permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield provided by this permit does not apply to any change made pursuant to this subsection.

[OAC 252:100-8-6(f)(2)]

## SECTION XIX. OPERATIONAL LIMITATIONS

A. The following limitations apply to the facility unless elsewhere covered by a more restrictive requirement:

- (1) No person shall cause or permit the discharge of emissions such that National Ambient Air Quality Standards (NAAQS) are exceeded on land outside the permitted facility.
- 
- (2) Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning Subchapter.
- 
- (3) No particulate emissions from any fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lb/MMBTU.
- 
- (4) No discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes,

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not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. [OAC 252:100-25]

- (5) No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. [OAC 252:100-29]
- (6) No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lb/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide. [OAC 252:100-31]
- (7) Volatile Organic Compound (VOC) storage tanks built after December 24, 1974, and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill pipe or with a vapor-recovery system. [OAC 252:100-37-15(b)]
- (8) All fuel-burning equipment shall at all times be properly operated and maintained in a manner that will minimize emissions of VOCs. [OAC 252:100-37-36]
- (9) Except as otherwise provided, no person shall cause or permit the emissions of any toxic air contaminant in such concentration as to cause or to contribute to a violation of the MAAC. (State only) [OAC 252:100-41]

## SECTION XX. STRATOSPHERIC OZONE PROTECTION

A. If the permittee performs a service on motor (fleet) vehicles when this service involves an ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all applicable requirements. Note: The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant. [40 CFR 82, Subpart B]

B. The permittee shall comply with the following standards for recycling and emissions reduction except as provided for MVACs in Subpart B. [40 CFR 82, Subpart F]

- (1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
- (2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
- (3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
- (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record-keeping requirements pursuant to § 82.166.
- (5) Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to § 82.158.
- (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

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## SECTION XXI. TITLE V APPROVAL LANGUAGE

A) DEQ wishes to reduce the time and work associated with permit review and, wherever it is not inconsistent with Federal requirements, to provide for incorporation of requirements established through construction permitting into the Source's Title V permit without causing redundant review. Requirements from construction permits may be incorporated into the Title V permit through the administrative amendment process set forth in Oklahoma Administrative Code 252:100-8-7.2(a) only if the following procedures are followed:

- (1) The construction permit goes out for a 30-day public notice and comment using the procedures set forth in 40 Code of Federal Regulations (CFR) § 70.7 (h)(1). This public notice shall include notice to the public that this permit is subject to Environmental Protection Agency (EPA) review, EPA objection, and petition to EPA, as provided by 40 CFR § 70.8; that the requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process; that the public will not receive another opportunity to provide comments when the requirements are incorporated into the Title V permit; and that EPA review, EPA objection, and petitions to EPA will not be available to the public when requirements from the construction permit are incorporated into the Title V permit.
- (2) A copy of the construction permit application is sent to EPA, as provided by 40 CFR § 70.8(a)(1).
- (3) A copy of the draft construction permit is sent to any affected State, as provided by 40 CFR § 70.8(b).
- (4) A copy of the proposed construction permit is sent to EPA for a 45-day review period as provided by 40 CFR § 70.8(a) and (c).
- (5) The DEQ complies with 40 CFR § 70.8 (c) upon the written receipt within the 45-day comment period of any EPA objection to the construction permit. The DEQ shall not issue the permit until EPA's objections are resolved to the satisfaction of EPA.
- (6) The DEQ complies with 40 CFR § 70.8 (d).
- (7) A copy of the final construction permit is sent to EPA as provided by 40 CFR § 70.8 (a).
- (8) The DEQ shall not issue the proposed construction permit until any affected State and EPA have had an opportunity to review the proposed permit, as provided by these permit conditions.
- (9) Any requirements of the construction permit may be reopened for cause after incorporation into the Title V permit by the administrative amendment process, by DEQ as provided in OAC 252:100-8-7.3 (a), (b), and (c), and by EPA as provided in 40 CFR § 70.7 (f) and (g).
- (10) The DEQ shall not issue the administrative permit amendment if performance tests fail to demonstrate that the source is operating in substantial compliance with all permit requirements.

B) To the extent that these conditions are not followed, the Title V permit must go through the Title V review process.